

REMARKS

I. Status of the Claims and the Rejections

In the final Office Action dated July 14, 2009, claims 22, 24-27, 29, 31, 32, 34-40, and 42 were rejected under 35 U.S.C. § 103(a) for obviousness based on Fischer et al U.S. Patent No. 5,513,500 ("Fischer '500") in view of Foye U.S. Patent No. 4,487,028 ("Foye '028"). Claims 28 and 41 were rejected under 35 U.S.C. § 103(a) for obviousness based on Fischer '500 in view of Foye '028 and Schuett U.S. Patent No. 3,216,215 ("Schuett '215").

In the Advisory Action dated September 30, 2009, the rejection of Claims 22, 24-29, 31, 32, and 34-42 as well as new claim 43 were maintained. Applicants are now filing a Request for Continued Examination and have amended claim 22. Applicants respectfully request reconsideration in view of the following remarks.

II. Claims 22, 24-29, 31, 32 and 34-42 are Non-Obvious

A. The Claims

Claim 22 recites "a refrigerating installation (12), including at least two refrigeration machines (18, 20) which operate independently of one another in parallel." Claim 22 has been amended to recite that "a conveying pipe (28) having a shut-off valve (29) is provided, which feeds the refrigerating agent from the refrigerating installation (12) by bypassing the at least one refrigeration consumer (44, 46, 48) directly to a pump unit (30) and back to the refrigerating installation (12)." This amendment is fully supported in the original specification on page 8, lines 8-14.

B. The Deficiencies of the Cited Prior Art

Fischer '500 is directed to a system for cooling food trolleys in the cabin of an aircraft. As shown in Fig. 2, Fischer '500 discloses a central cooling plant (4) located underneath

the cabin of an aircraft and selectively coupled to heat exchangers (9A, 9B) in the aircraft galleys via a supply conduit (5) and a return conduit (6). The heat exchangers (9A, 9B) in the galleys are coupled to the supply and return conduits (5, 6) using a plurality of connector conduits (10A, 10B, 11A, 11B). However, Fischer '500 does not disclose a shut-off valve which may be actuated to partially bypass the heat exchangers (9A, 9B). Furthermore, Foye '028 and Schuett '215 also fail to disclose a shut-off valve to overcome the deficiencies of Fischer '500.

Consequently, the combination of references fails to disclose a refrigerating installation which includes a shut-off valve as recited in amended claim 22. Each of claims 24-29, 31, 32 and 34-42 depends from independent claim 22, and recites one or more additional features in combination with the features of claim 22. For substantially the same reasons set forth above with respect to claim 22, and further because the relied upon prior art does not support an obviousness rejection as to any of these combinations of elements, each of claims 24-29, 31, 32 and 34-42 is also patentable. Applicants respectfully request that the rejection of claims 22, 24-29, 31, 32 and 34-42 now be withdrawn.

III. Claim 43 is Non-Obvious

A. The Claim

Claim 43 recites a method of cooling heat generating installations in an aircraft. The method includes "coupling at least two refrigeration machines in parallel to a refrigeration transport system in the aircraft" and "operating the at least two refrigeration machines for an equal amount of time on average."

B. The Deficiencies of the Cited Prior Art

The Advisory Action maintained the rejection of new claim 43 without an independent explanation of how Fischer '500 and Foye '028 teach the operation of at least two

refrigeration machines for an equal time on average. As discussed in the previous response dated September 14, 2009, Fischer '500 and Foye '028 are completely silent about operating refrigeration machines an equal amount of time on average. The obviousness rejection of a method step cannot be maintained where there is absolutely no teaching in either of the cited references that would lead one of ordinary skill in the art to the claimed operation.

Additionally, Fischer '500 teaches away from adding a second refrigeration machine in an aircraft as the Advisory Action suggests because Fischer '500 is focused on reducing the weight of an aircraft. Fischer '500 observes that "it is especially advantageous that a single central cooling plant provides the necessary cooling capacity for all of the galleys in the aircraft" because "a considerable saving of space and weight is achieved in each galley" (Col. 2, ll. 30-36). Thus, a person of ordinary skill in the art would not sacrifice this "considerable saving of space and weight" in Fischer '500 by adding a duplicate parallel refrigeration system as alluded to in Foye '028. And the Patent Office cannot ignore this teaching of Fischer '500, which diverges from the substance of claim 22. Stated another way, combining these elements of Fischer '500 and Foye '028, in the manner indicated, would require the person of ordinary skill in the art to completely ignore the expressly stated benefits of the Fischer '500 cooling system.

Obviousness does not rely on whether the method taught by the combination of references would be operable, but rather on whether the combination of references would suggest the claimed method. In this case, one of ordinary skill in the art would be led away from coupling two refrigeration machines in parallel on an aircraft in view of the benefits taught by Fischer '500. Therefore, this combination is improper and should be withdrawn.

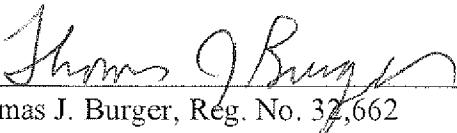
For at least these reasons, Fischer '500 and Foye '028 do not render obvious each step of claim 43. Applicants respectfully request the allowance of claim 43.

IV. Conclusion

Based on the amendments to the claims and these remarks, Applicants respectfully assert that this case is in condition for allowance, and respectfully request a notice to that effect. If the Examiner believes any issue requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved.

Applicants do not believe that any fee is due in connection with this submission other than the fee accompanying the Request for Continuing Examination. However, if any additional fees are necessary to complete this communication, the Commissioner may consider this to be a request for such and charge any necessary fees to Deposit Account No. 23-3000.

Respectfully submitted,
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